

WE CLAIM:

1 1. A tool for remotely installing a clamshell device
2 around an element, the tool comprising:
3 (a) a frame;
4 (b) a hydraulic system supported by the frame; and
5 (c) at least one set of two clamps supported by the
6 frame, the set suitable for holding and releasing the
7 clamshell device selected from the group consisting of
8 vortex-induced vibration reduction devices and drag
9 reduction devices,
10 wherein the set of clamps is connected to the
11 hydraulic system.

1 2. The tool of claim 1,
2 wherein the frame has a top and a bottom,
3 wherein the set of clamps is comprised of a first
4 clamp and a second clamp, and
5 wherein the first clamp is supported by the top of
6 the frame and the second clamp is supported by the bottom
7 of the frame.

8 3. The tool of claim 1, wherein there are at least two
9 sets of clamps.

1 4. The tool of claim 1, wherein the set of clamps
2 holds the clamshell device.

1 5. The tool of claim 2, wherein the first clamp and
2 the second clamp each comprise at least one nipple
3 for anchoring the clamshell device to the set of
4 clamps.

5 6. The tool of claim 3, wherein there are at least two
6 clamshell devices, and
7 wherein each of the at least two sets of clamps
8 holds one clamshell device.

1 7. The tool of claim 1, wherein the frame has a taller
2 first height and is collapsible to a shorter second
3 height for holding shorter devices or for storage of the
4 tool.

1 8. A method of remotely installing a clamshell device
2 around an element having a diameter, the method
3 comprising:

4 (a) positioning a tool adjacent to the element,
5 wherein the tool carries the clamshell device selected
6 from the group consisting of vortex-induced vibration
7 reduction devices and drag reduction devices;

8 (b) moving the tool to position the clamshell
9 device around the element;

10 (c) operating the tool to close the clamshell
11 device around the element, wherein the device covers from
12 about 50% to about 100% of the diameter of the element;

13 (d) securing the device in position around the
14 diameter of the element.

1 9. The method of claim 8, wherein the tool of step (a)
2 carries at least two clamshell devices, the method
3 further comprising:

4 (e) repeating steps (a), (b), (c), and (d).

1 10. The method of claim 8, wherein the clamshell device
2 installed is an ultra-smooth sleeve.

1 11. The method of claim 8, wherein the clamshell device
2 installed is a flotation module.